PUYALLUP TRIBE OF INDIANS

WATER QUALITY STANDARDS FOR SURFACE WATERS OF THE PUYALLUP TRIBE

PREPARED FOR THE
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Prepared by

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PART I – INTRODUCTION

SECTION 1. Purpose and Scope.

(1) The Puyallup Tribal Council hereby establishes these water quality standards for the surface waters of the Puyallup Tribe. These standards shall provide a mechanism for managing and regulating the quality and use of said waters by establishing the water quality goals for specific waterbodies, and by providing a legal basis for regulatory controls.

(2) The purposes of these water quality standards are to restore, maintain and protect the chemical, physical, biological, and cultural integrity of the surface waters of the Puyallup Tribe; to promote the health, social welfare, and economic well-being of the Puyallup Tribe, its people, and all the residents of the Puyallup Reservation; to achieve a level of water quality that provides for all cultural uses of the water, the protection and propagation of fish and wildlife, for recreation in and on the water, and all existing and designated uses of the water; and to provide for protection of threatened and endangered species.

(3) These standards are designed to establish the uses for which the surface waters of the Puyallup Tribe shall be protected, to prescribe water quality standards (narrative and numeric) to sustain the designated uses, and to protect existing water quality.

(4) These standards shall apply to all surface waters within the Clean Water Act jurisdiction of the Puyallup Tribe, including the mainstem Puyallup River from River Mile (RM) 1.0 to the upriver boundary of the 1873 Survey Area (~RM 7.3), as well as all surface waters covering Trust lands within the 1873 Survey Area boundary of the Puyallup Indian Reservation.

(5) The water use and quality criteria set forth herein are established in conformance with present and potential water uses of the surface waters of the Puyallup Tribe and in consideration of the natural water quality potential and limitations of the same.

(6) The Puyallup River and its treaty fisheries have always been of central importance to the Puyallup Tribe. Over the last 150 years the Tribe has repeatedly fought to protect these interests. Tribal families continue to live, fish, and access traditional cultural properties along the lower river; and the physical, economic, and cultural well-being of the Tribe remains linked to the health of the river. For these reasons, the Puyallup Tribal Council considers all waters under the Tribe's Clean Water Act jurisdiction to be waters of Exceptional Cultural Significance, as defined in these standards.

SECTION 2. Definitions.

(1) "1B3" is a biologically based flow that indicates an allowable exceedance of water quality standards once in three years. It is determined by EPA's DFLOW computerized model.

(2) "1-DMax" or "1-day maximum temperature" is the highest water temperature reached on any given day. This measure can be obtained using calibrated maximum/minimum thermometers or continuous monitoring probes having sampling intervals of one hour or less.

(3) "1-Dmin" or "1-day minimum" in milligrams per liter is the lowest dissolved oxygen content reached on any given day. This measure can be obtained using calibrated probes or continuous monitoring probes having sampling intervals of one hour or less.

(4) "4B3" is a biologically based flow that indicates an allowable exceedance of water quality standards for 4 consecutive days once in 3 years. It is determined by EPA's DFLOW computerized model.

(5) "7-DADMax" or "7-day average of the daily maximum temperatures" is the arithmetic average of seven consecutive measures of daily maximum temperatures. The 7- DADMax for any individual day is calculated by averaging that day's daily maximum temperature with the daily maximum temperatures of the three days prior and the three days after that date.

(6) "7-DADMean" or "7-day average of the daily mean dissolved oxygen" is the arithmetic average of seven consecutive measures of daily mean dissolved oxygen. The 7- DADMean for any individual day is calculated by averaging that day's daily mean reading with the daily mean readings of the three days prior and the three days after that date.

(7) "7Q10 flow" refers to the lowest consecutive 7-day streamflow that is likely to occur in a ten-year period.

(8) "Acute conditions" means changes in the physical, chemical, or biologic environment which are expected or demonstrated to result in injury or death to an organism as a result of short-term exposure to the substance or detrimental environmental condition.

(9) "AKART" is an acronym for "all known, available, and reasonable methods of prevention, control, and treatment." AKART shall represent the most current methodology that can reasonably be required for preventing, controlling, or abating the pollutants associated with a discharge. The concept of AKART applies both to point and nonpoint sources of pollution. The term "best management practices," typically applied to nonpoint source pollution control is considered a subset of the AKART requirement. "The Stormwater Management Manual for Western Washington" (2001) may be used as a guideline, to the extent appropriate, for developing best management practices to apply AKART for stormwater discharges.

(10) "Background conditions" means the biological, chemical, and physical conditions of a waterbody, outside the area of influence of the discharge under consideration. Background sampling location in an enforcement action would be upgradient or outside the area of influence of the discharge. If several discharges to any water body exist; and enforcement action is being taken for possible violations to the standards, background sampling would be undertaken immediately upgradient from each discharge. This section only establishes background conditions for purposes of measuring the biological, chemical, and physical conditions of water upgradient from the discharge under consideration. The establishment of background conditions under this Ordinance shall not infer that background conditions are

acceptable or desirable. The Department may establish policies and programs to improve background conditions identified under this section. This section does not establish nor shall it be construed as a waiver of any rights of the Tribe to natural background conditions or treaty-based background conditions.

(11) "Best management practices (BMP)" means physical, structural, and/or managerial practices approved by the Department that, when used singularly or in combination, prevent, reduce, or treat pollutant discharges. (see also "AKART")

(12) "Biological assessment" is an evaluation of the biological condition of a water body using surveys of aquatic community structure and function and other direct measurements of resident biota in surface waters.

(13) "Carcinogen" means any substance or agent thatis capable of inducing cancer. For implementation of this ordinance, the term carcinogen will apply to substances that meet the definition of carcinogen consistent with the weight of evidence approach specified in the Environmental Protection Agency's Guidelines for Carcinogenic Risk Assessment as set forth in 51 Federal Register 33992, as presently published or as subsequently amended or republished.

(14) "Ceremonial and Religious water use" means activities involving traditional Native American spiritual and cultural practices which involve primary (direct) and/or secondary contact with water.

(15) "Chronic conditions" are changes in the physical, chemical, or biologic environment which are expected or demonstrated to result in injury or death to an organism as a result of repeated or constant exposure over an extended period of time to a substance or environmental condition.

(16) "Conservancy" refers to areas that are set aside and dedicated specifically to promote the preservation and restoration of water quality and water-dependent natural and cultural resources.

(17) "Critical condition" means the physical, chemical, and biological characteristics of the receiving water and point source discharge, nonpoint source, or instream activity that interact to produce the greatest potential adverse impact on aquatic biota and existing or designated water uses.

(18) "Damage to the ecosystem" means any demonstrated or predicted stress to aquatic or terrestrial organisms or communities of organisms which the Department reasonably concludes may interfere with the health, survival success, or natural structure of such populations. This stress may be due to, but is not limited to, alteration in habitat or changes in water temperature, chemistry, or turbidity, and shall consider the potential buildup of discharge constituents or temporal increases in habitat alteration which may create such stress in the long-term.

(19) "Department" means Puyallup Tribe Environmental Protection Department.

(20) "Director" means Puyallup Tribe Environmental Protection Department Director.

(21) “Enterococci” refers to a subgroup of the fecal streptococci that includes S. faecalis, S. faecium, S. gallinarum, and S. avium. The enterococci are differentiated from other streptococci by their ability to grow in 6.5% sodium chloride, at pH 9.6, and at 10°C and 45°C.

(22) “E. coli” or “Escherichia coli” is a facultatively-aerobic, gram-negative, rod-shaped bacteria abundant in the large intestine of mammals.

(23) “Estuarine habitat” refers to the physical, chemical, and biological characteristics of estuaries that are necessary to support vegetation, fish, shellfish, wildlife, and other natural estuarine biological communities. “Estuaries” are defined as any semi-enclosed coastal body of water which has free connection to the open marine environment, extending into the riverine system as far as the limit of tidal influence, and within which marine water is measurably diluted with fresh water derived from land drainage.

(24) “Existing uses” means those uses actually attained in fresh or marine waters on or after November 28, 1975, whether or not they are designated uses.

(25) “Fecal coliform” means that portion of the coliform group which is present in the intestinal tracts and feces of warm-blooded animals as detected by the product of acid or gas from lactose in a suitable culture medium within twenty-four (24) hours at 44.5 plus or minus 0.2 degrees Celsius.

(26) “Geometric mean” means either the nth root of a product of n factors, or the antilogarithm of the arithmetic mean of the logarithms of the individual sample values.

(27) “Hardness” means a measure of the calcium and magnesium salts present in water. For purposes of this Ordinance, hardness is measured in milligrams per liter and expressed as calcium carbonate (CaCO3). For the purposes of determining compliance with permit limits and requirements, hardness is considered to mean hardness of the receiving water.

(28) “Harmonic mean flow” is a long-term mean flow calculated by dividing the number of daily flows analyzed by the sum of the reciprocals of those daily flows.

(29) “Mean detention time” means the time obtained by dividing a reservoir’s mean annual minimum total storage by the 30-day ten-year low-flow from the reservoir.

(30) “Migration or translocation” means any natural movement of an organism or community of organisms from one locality to another locality.

(31) “Mixing zone” means that portion of a water body adjacent to an effluent outfall where mixing results in the dilution of the effluent with the receiving water. Water quality criteria may be exceeded in a mixing zone as conditioned and provided for in Section 16 of this ordinance.

(32) “Natural conditions” or “natural background levels” means surface water quality that would be present but for any human-caused pollution or other alteration.

(33) “Nonpoint source” means pollution that enters any waters of the Puyallup Tribe from any dispersed land-based or water-based activities, including but not limited to atmospheric deposition, surface water runoff from agricultural lands, urban areas, or forest lands; subsurface or underground sources, or discharges from boats or marine vessels not otherwise regulated under the National Pollutant Discharge Elimination System program.

(34) “Permit” means a document issued by a government specifying the waste treatment and control requirements and waste discharge conditions.

(35) “pH” means the negative logarithm of the hydrogen ion concentration.

(36) “Pollution” means such contamination, or other alteration of the physical, chemical or biologic properties, of any waters of the Puyallup Tribe, including change in temperature, taste, color, turbidity, or odor of the waters, or such discharge of any liquid, gaseous, solid, radioactive, or other substance into any waters of the Puyallup Tribe as will or is likely to interfere with designated or existing uses.

(37) “Primary contact recreation” means activities where a person would have direct contact with water to the point of complete submergence, including, but not limited to, skin diving, swimming, and water skiing.

(38) “Secondary contact recreation” means activities where a person’s water contact would be limited (wading or fishing) to the extent that bacterial infections of eyes, ears, respiratory or digestive systems, or urogenital areas would normally be avoided.

(39) “Settlement Agreement” means the Settlement Agreement of August 27, 1988 ratified by Congress in the Puyallup Land Claim Settlement Act, 25 U.S.C. § 1773(b).

(40) “Stormwater” means that portion of precipitation that does not naturally percolate into the ground or evaporate, but flows via overland flows, interflow, pipes, and other features of a stormwater drainage system into a defined surface water body, or a constructed infiltration facility.

(41) “Surface waters of the Puyallup Tribe” includes rivers, ponds, streams, inland waters, wetlands and all other surface waters and water courses on trust land within the 1873 Survey Area described in the Settlement Agreement of August 27, 1988 ratified by Congress in the Puyallup Land Claim Settlement Act, 25 U.S.C. § 1773(b).

(42) “Temperature” means water temperature expressed in degrees Celsius (°C).

(43) “Treaty rights” means those rights protected by and incidental to use and enjoyment of the Medicine Creek Treaty between the Puyallup Tribe of Indians and the United States of America.

(44) “Turbidity” means the clarity of water expressed as nephelometric turbidity units (NTU) and measured with a calibrated turbidimeter.

(45) "USEPA" means the United States Environmental Protection Agency.

(46) "Wildlife habitat" means waters of the Puyallup Tribe used by, or that directly or indirectly provide food support to, fish, other aquatic life and wildlife for any life history stage or activity.

SECTION 3. General Considerations.

The following general guidelines shall apply to the water quality criteria and classifications set forth in sections **4** through **14** hereof:

(1) At all boundaries between waters with different assigned uses, the water quality criteria necessary to protect the most sensitive uses shall apply.

(2) In brackish waters of estuaries, where the fresh and marine water quality criteria differ within the same classification, the aquatic life criteria of this section apply as follows:

> (A) For waters in which the volume-averaged salinity is equal to or less than one part per thousand 95 percent or more of the time, the applicable criteria are the fresh water criteria.
>
> (B) For waters in which the volume-averaged salinity is greater than ten parts per thousand 95 percent or more of the time, the applicable criteria are the marine water criteria.
>
> (C) For waters in which the volume-averaged salinity is between one and ten parts per thousand, the applicable criteria are the more stringent of the fresh water or marine water criteria.

(3) In determining compliance with the bacteria criteria in Sections 4, 5, and 6 of this ordinance, averaging of data collected beyond a thirty-day period, or beyond a specific discharge event under investigation, shall not be permitted when such averaging would skew the data set so as to mask noncompliance periods.

(4) Waste discharge permits, whether issued pursuant to the National Pollutant Discharge Elimination System or otherwise, shall be conditioned in such manner as to authorize discharges that meet these water quality standards.

> (A) However, persons discharging wastes in compliance with the terms and conditions of permits shall not be subject to civil and criminal penalties on the basis that the discharge violates water quality standards.
>
> (B) Permits shall be subject to modification by the Department whenever it appears to the Department the discharge violates water quality standards. Modification of permits, as provided herein, shall be subject to review in the same manner as originally issued permits.

(5) Due consideration will be given to the precision and accuracy of the sampling and analytical methods used as well as existing conditions at the time, in the application of the criteria.

(6) The analytical testing methods for these criteria shall be in accordance with the Guidelines Establishing Test Procedures for the Analysis of Pollutants, 40 C.F.R. Part 136, and other or superseding methods published and/or approved by the Department and with the concurrence of the USEPA.

(7) Nothing in this ordinance shall be interpreted to prohibit the establishment of effluent limitations for the control of the thermal component of any discharge in accordance with Section 316 of the Federal Clean Water Act, 33 U.S.C. § 1326.

PART II – DESIGNATED USES AND CRITERIA

Sections 4, 5, and 6 of this Part identify the designated uses and applicable criteria for fresh waters (Section 4), estuarine waters (Section 5), and marine waters (Section 6) of the Puyallup Tribe. Section 7 assigns appropriate designated uses and their associated criteria to specific waterbodies. The criteria that apply to any specific waterbody or waterbody segment shall be determined based on the most stringent criteria required to protect all assigned designated uses.

SECTION 4. Fresh Water Designated Uses and Criteria.

The following uses are designated for protection in fresh surface waters of the Puyallup Tribe. Use designations for specific waterbodies are listed in Section 7.

(1) Aquatic life uses. Aquatic life uses are designated using the following categories of key species. It is intended that nonspecified fish and nonfish aquatic species must also be protected.

(A) The categories for aquatic life uses are:

(i) Native char rearing. This category applies to waterbodies for the protection of tributary rearing for the first years of life by any species of native char (bull trout and Dolly Varden). This use and the associated criteria are to be applied year round.

(ii) Native char migration. This category applies to waterbodies for the protection of adult and sub-adult native char foraging and migration. This use and the associated criteria are to be applied year round.

(iii) Salmonid spawning. This category applies to waterbodies that are protected *where* and *when* spawning, egg incubation, and fry emergence for native species of salmon and trout *occurs* or *may occur*. This use and the associated criteria are to be applied seasonally, from September 1st through July 1st.

(iv) Salmonid rearing and holding. This category applies to waterbodies that are protected *where* and *when* rearing by native species of salmon and trout *occurs* or *may occur*, and where adult salmonids may hold throughout the summer prior to spawning. Waters with this use designation are intended to be protective of uses including feeding, resting, growth, physiological adaptation, and other uses associated with salmonid rearing. This use and the associated criteria are to be applied year round.

(v) Salmonid migration. This category applies to waterbodies that are protected *where* and *when* migration of adult and juvenile species of salmon and trout *occurs* or *may occur*. This use and the associated criteria are to be applied year round.

(vi) Steelhead smoltification. This category applies to waterbodies that are protected *where* and *when* steelhead trout smoltification *occurs* or *may occur*. This use and the associated criteria are to be applied seasonally, from April 15th through June 15th.

(B) **General criteria.** General criteria that apply to all aquatic life fresh water uses are described in Sections 8 through 12.

(C) **Aquatic life temperature criteria**. Except where noted, water temperature is measured by the "7-day average of the daily maximum temperatures", or "7-DADMax" in degrees Celsius (˚C). Table 1 lists the maximum temperatures for each of the aquatic life use categories.

Table 1. Aquatic Life Temperature Criteria for Fresh Waters

Use Category	7- DADMax
Native char rearing	12 ˚C
Native char migration	13 ˚C
Salmonid spawning	13 ˚C
Salmonid rearing and holding	16 ˚C
Salmonid migration	18 ˚C
Steelhead smoltification	14 ˚C

(i) When a waterbody's temperature is warmer than the criteria in table 1, and that condition is due to natural conditions, then human actions considered cumulatively (including both point and nonpoint sources) may not cause the 7-DADMax temperature of that waterbody to increase more than 0.25 ^{o}C.

(ii) Temperatures are not to exceed the criteria at a probability frequency of more than once every ten years on average.

(iii) Temperature measurements should represent the waterbody segment as a whole and should:

(a) Be taken from well-mixed portions of rivers and streams;

(b) Not be taken from shallow or stagnant backwater areas, within isolated thermal refuges, at the surface, or at the waters edge.

(iv) Temperatures must be maintained to fully protect uses of downstream waters.

(v) The following criteria are intended to prevent acute lethality and barriers to fish migrations, and are to be applied when complying with provisions

established in the mixing zone provision in Section 16. The criteria do not override the temperature criteria established for waters in subsection (1)(C) of this section:

(a) To protect salmonids from thermal shock leading to increased predation, thermal plumes shall be conditioned so that temperatures exceeding 25 °C are limited to less than 5 percent of the cross-sectional area of a receiving water.

(b) To prevent the development of conditions that may block the migration of adult salmonids, thermal plumes shall be conditioned so that temperatures exceeding 21 °C are limited to less than 25 percent of the cross-sectional area of a receiving water.

(c) To protect waters used for salmonid spawning, egg incubation, and fry emergence, thermal plumes shall be limited so that temperatures exceeding 13 °C do not occur in the vicinity of active spawning and egg incubation areas.

(d) To protect salmonids from conditions that may cause instantaneous lethality, thermal plumes shall be conditioned such that fish could not be entrained (based on plume time of travel) for more than two seconds at temperatures above 32°C.

(vi) Nothing in this chapter shall be interpreted to prohibit the establishment of effluent limitations for the control of the thermal component of any discharge in accordance with 33 U.S.C. 1326 (commonly known as section 316 of the Clean Water Act).

(D) **Aquatic life dissolved oxygen (DO) criteria**. The DO criteria is measured in milligrams per liter (mg/L), and includes both a short term one-day minimum and a longer term minimum based on the 7-day average of the daily mean or 7-DADMean. Table 2 lists minimum DO for each of the aquatic life use categories.

Table 2. Aquatic Life Dissolved Oxygen Criteria for Fresh Waters

Use Category	7-DADMean	Minimum
Native char rearing	11 mg/L	9 mg/L
Native char migration	11 mg/L	9 mg/L
Salmonid spawning	11 mg/L	9 mg/L
Salmonid rearing and holding	8.5 mg/L	6.5 mg/L
Salmonid migration	8.5 mg/L	6.5 mg/L
Steelhead smoltification	8.5 mg/L	6.5 mg/L

(i) When a waterbody's DO is lower than the criteria in the table 2 and that condition is due to natural conditions, then human actions considered cumulatively (including both point and nonpoint sources) may not cause the 7-DADMin to decrease more than 0.2 mg/L.

(ii) Concentrations of DO are not to fall below the criteria in the table at a probability frequency of more than once every ten years on average.

(iii) Unless site-specific knowledge of the patterns of aquatic life use in a waterbody dictate otherwise, DO measurements should represent the water segment as a whole and should:

(a) Be taken from well-mixed portions of rivers and streams; and

(b) Not be taken from shallow or stagnant backwater areas, within isolated thermal refuges, at the surface, or at the waters edge.

(iv) DO must be maintained to fully protect all existing and designated aquatic life uses of downstream waters.

(E) **Aquatic life turbidity criteria**. Turbidity is measured in "nephelometric turbidity units" or "NTU". Table 3 lists the maximum turbidity criteria for each of the aquatic life use categories.

Table 3. Aquatic Life Turbidity Criteria for Fresh Waters	
Use Category	**Criteria**
Native char rearing	Turbidity shall not exceed: • 5 NTU over background when the background turbidity is 50 NTU or less; or • A 10 percent increase in turbidity when the background turbidity is more than 50 NTU.
Native char migration	Same as above
Salmonid spawning	Same as above
Salmonid rearing and holding	Same as above
Salmonid migration	Turbidity shall not exceed: • 10 NTU over background when the background turbidity is 50 NTU or less; or • A 20 percent increase in turbidity when the background turbidity is more than 50 NTU.
Steelhead smoltification	Turbidity shall not exceed: • 5 NTU over background when the background turbidity is 50 NTU or less; or • A 10 percent increase in turbidity when the background turbidity is more than 50 NTU.

(F) **Aquatic life total dissolved gas (TDG) criteria**. TDG is measured in percent saturation. Table 4 lists the maximum TDG criteria for each of the aquatic life use categories.

Table 4. Aquatic Life Total Dissolved Gas Criteria for Fresh Waters	
Use Category	**Criteria**
Native char rearing	Total dissolved gas shall not exceed 110 percent of saturation at any point of sample collection.
Native char migration	Same as above
Salmonid spawning	Same as above
Salmonid rearing and holding	Same as above
Salmonid migration	Same as above
Steelhead smoltification	Same as above

(G) **Aquatic life pH criteria**. Measurement of pH is expressed as the negative logarithm of the hydrogen ion concentration. Table 5 lists the pH levels for each of the aquatic life use categories.

Table 5. Aquatic Life pH Criteria for Fresh Waters	
Use Category	**Criteria**
Native char rearing	pH shall be within the range of 6.5 to 8.5, with a human-caused variation within the above range of less than 0.2 units.
Native char migration	pH shall be within the range of 6.5 to 8.5, with a human-caused variation within the above range of less than 0.5 units.
Salmonid spawning	pH shall be within the range of 6.5 to 8.5, with a human-caused variation within the above range of less than 0.2 units.
Salmonid rearing and holding	pH shall be within the range of 6.5 to 8.5, with a human-caused variation within the above range of less than 0.5 units.
Salmonid migration	Same as above
Steelhead smoltification	pH shall be within the range of 6.5 to 8.5, with a human-caused variation within the above range of less than 0.2 units.

(2) Water Contact Uses. The water contact uses include primary and secondary contact recreation.

(A) **Water contact bacteria criteria**. Table 6 lists the bacteria criteria to protect fresh water contact uses.

Table 6. Water Contact Bacteria Criteria for Fresh Water.	
Use Category	**Indicator Criteria**
Primary contact recreation	*E. coli* organism levels must not exceed a geometric mean value of 126/100 mL, with no single sample value exceeding 235/100 mL.
Secondary contact recreation	*E. coli* organism levels must not exceed a geometric mean value of 126/100 mL, with no single sample value exceeding 408/100 mL.

(i) Averaging of data collected beyond a thirty-day period, or beyond a specific discharge event under investigation, is not permitted when such averaging would skew the data set so as to mask noncompliance periods.

(ii) It is preferable to average by season and include five or more data collection events within each period.

(iii) When averaging bacteria sample data for comparison to the geometric mean criteria, the period of averaging should not exceed 12 months, and should have sample collection dates well distributed throughout the reporting period.

(iv) When determining compliance with the geometric mean and single sample bacteria criteria in or around small sensitive areas, such as popular swimming beaches, it is recommended that multiple samples are taken throughout the area during each visit. Such multiple samples should be arithmetically averaged together (to reduce concerns with low bias when the data is later used in calculating a geometric mean) to reduce sample variability and to create a single representative data point.

(v) The Department may, at its discretion, establish site-specific bacteria criteria for rivers and streams that cause, or significantly contribute to, the decertification or conditional certification of commercial or recreational shellfish harvest areas even when the preassigned bacteria criteria for the river or stream are being met.

(vi) Where information suggests that sample results are due primarily to sources other than warm-blooded animals (e.g., wood waste), alternative indicator criteria may be established on a site-specific basis by the Department.

(3) Water supply uses. The water supply uses include domestic, agricultural, and industrial water supplies.

(A) **Domestic water supply**. This use includes waters that are the source of drinking water supplies, and may include waters used for food processing. In addition to the narrative criteria in Section 10, waters that are used for, or designated for use as, domestic water supplies shall also meet the human health toxics criteria in Section 8 (Table 13) based on consumption of both water and organisms.

(B) **Agricultural water supply**. This use includes waters that are protected for irrigation of crops, consumption by livestock, support of vegetation for range grazing, and other uses in support of farming and ranching and protects livestock and crops from injury due to irrigation and other exposures. The criteria are applied to all rivers, lakes, and reservoirs that are used for, or designated for use as, agricultural supply water. These criteria are not to be applied on-farm or at individual points of use within irrigation projects that are designed to capture and reuse drainage water from individual agricultural operations. The criteria which follow are to be implemented as an arithmetic average value for the period of April 1 – September 30. A minimum of three samples taken during this six-month period is to be used to determine the value for compliance. Since these criteria are not aimed at preventing short-term exceedences, sample values from the last consecutive three-year period may be combined to create a stronger data base for determining compliance. To average multiple years, however, the

number of samples in each monthly or bimonthly period must generally be equal so as to reduce the chance of seasonal bias.

(i) Electrical conductivity is not to exceed 700 microsiemens per centimeter (μS/cm).

(ii) Bicarbonate is not to exceed 339 milligrams per liter (mg/L).

(iii) Total suspended solids is not to exceed 75 milligrams per liter (mg/L).

(iv) pH must be within the range of 6.5 to 9.0 standard units.

(C) **Industrial water supply**. This use includes waters that are protected for industrial cooling and process water supplies, and protects industrial equipment from damage from cooling and/or process waters. In addition to the general criteria, the Department may develop site-specific criteria under this use based on the type of industry involved.

(4) Cultural uses. The cultural water uses include ceremonial and religious water contact, and cultural and subsistence fish consumption.

(A) **Ceremonial and religious water contact**. This use includes waters that are protected for ceremonial or religious activities where a person would have direct contact with water to the point of complete submergence. In addition to the narrative criteria in Section 10, waters that are used for, or designated for, ceremonial and religious activities involving water contact shall also meet the bacteria criteria in Table 6 for primary contact recreation.

(B) **Cultural and subsistence fish consumption**. This use includes waters that are protected for harvest and ceremonial, cultural, or subsistence consumption of fish and shellfish. In addition to the narrative criteria in Section 10, waters that are used for, or designated to be used for, cultural and subsistence fish consumption shall also meet the human health toxics criteria in Section 8 (Table 13) based on consumption of organisms.

(5) Miscellaneous Uses. The miscellaneous fresh water uses include wildlife habitat, commerce and navigation, conservancy, and aquaculture.

SECTION 5. Estuarine Waters Designated Uses and Criteria.

Estuarine surface waters include those surface waters with salinity values between 1 and 10 parts per thousand (i.e., those that do not meet the criteria for fresh water OR marine water as described in Sections 3(2)(A) and (B)). The following uses are designated for protection in estuarine surface waters of the Puyallup Tribe. Use designations for specific waterbodies are listed in Section 7.

(1) Aquatic life uses. In addition to the fresh water aquatic life uses (Section 4(1)) and marine water aquatic life uses (Section 6(1)) that may occur in estuarine waters, the following aquatic life use designation shall apply to estuarine waters.

(A) **Estuarine and brackish water habitat**. This use designation shall apply to those waters with salinity values between 1 and 10 parts per thousand (i.e., those that do not meet the criteria for fresh water OR marine water as described in Sections 3(2)(A) and (B)). This designation includes uses of water that support estuarine ecosystems, including, but not limited to, preservation, restoration, or enhancement of estuarine habitats, vegetation, fish, shellfish, or wildlife (e.g., estuarine mammals, waterfowl, shorebirds), and the propagation, sustenance, and migration of estuarine organisms.

(B) **General criteria**. General criteria that apply to all aquatic life estuarine water uses are described in Sections 8 through 12.

(C)**Narrative Criteria**. Water quality conditions sufficient to support a natural gradient in species composition and wildlife habitat characteristic of estuarine and brackish water habitat shall be maintained. Water quality conditions shall be maintained so that none of the following occurs: (a) loss of diversity; (2) conversion of brackish water habitat to marine water habitat; (3) for animals, decreased population abundance of those species vulnerable to increased mortality and loss of habitat from increased salinity; or (4) for plants, significant reduction in stature or percent cover from increased water or soil salinity or other water quality parameters.

(D) **Aquatic life dissolved oxygen (DO) criteria**. The aquatic life dissolved oxygen criterion for estuarine waters shall be defined as no measurable change from natural conditions.

(2) All Other Designated Uses. All designated uses assigned to fresh and marine waters adjacent to (upstream and downstream of) estuarine waters shall apply to estuarine waters, and criteria shall be assigned following the provisions in Section 3(2)(C).

SECTION 6. Marine Water Designated Uses and Criteria.

The following uses are designated for protection in marine surface waters of the Puyallup Tribe. Use designations for specific waterbodies are listed in Section 7.

(1) Aquatic life uses. Aquatic life uses are designated using the following categories of key species. It is intended that nonspecified fish and nonfish aquatic species that are naturally found in association with the key species will also be protected.

(A) The categories for aquatic life uses are:

(i) **Extraordinary quality** salmonid and other fish migration, rearing, spawning and harvesting; clam, oyster, and mussel rearing, spawning, and harvesting;

crustaceans and other shellfish (crabs, shrimp, crayfish, scallops, etc.) rearing spawning, and harvesting.

(ii) **Excellent quality** salmonid and other fish migration, rearing, spawning, and harvesting; clam, oyster, and mussel rearing, spawning, and harvesting; crustaceans and other shellfish (crabs, shrimp, crayfish, scallops, etc.) rearing spawning, and harvesting.

(iii) **Good quality** salmonid and other fish migration, rearing, spawning, and harvesting; clam, oyster, and mussel rearing, and spawning; crustaceans and other shellfish (crabs, shrimp, crayfish, scallops, etc.) rearing spawning, and harvesting.

(B) **General criteria**. General criteria that apply to all aquatic life marine water uses are described in Sections 8 through 12.

(C) **Aquatic life temperature criteria**. Except where noted, temperature is measured as a "1-day maximum temperature" or "1-DMax" in degrees Celsius (°C). Table 7 lists the maximum temperature criteria allowed as a result of human actions for each of the aquatic life use categories.

Table 7. Aquatic Life Temperature Criteria for Marine Waters

Use Category	1- DMax
Extraordinary quality	No measurable change from natural background
Excellent quality	16 °C
Good quality	19 °C

Notes in Section 4(1)(C)(i) through(vi) for aquatic life temperature criteria in fresh water apply to this table where applicable to marine water.

(D) **Aquatic life dissolved oxygen (DO) criteria**. Except where noted, DO concentrations are measured as a 1-day minimum or "1-DMin" in milligrams per liter. Table 8 lists the DO criteria allowed as a result of human actions for each of the aquatic life use categories.

Table 8. Aquatic Life Dissolved Oxygen Criteria for Marine Waters

Use Category	1- Dmin
Extraordinary quality	No measurable change from natural background
Excellent quality	6.0 mg/L
Good quality	5.0 mg/L

Notes in Section 4(1)(D)(i) through(iv) for aquatic life dissolved oxygen criteria in fresh water apply to this table where applicable to marine water.

(E) **Aquatic life turbidity criteria**. Turbidity is measured in "nephelometric turbidity units" or "NTU". Table 9 lists the maximum turbidity criteria allowed as a result of human actions for each of the aquatic life use categories.

Table 9. Aquatic Life Turbidity Criteria for Marine Waters	
Use Category	**Criteria**
Extraordinary quality	Turbidity shall not exceed: • 5 NTU over background when the background turbidity is 50 NTU or less; or A 10 percent increase in turbidity when the background turbidity is more than 50 NTU.
Excellent quality	Same as above
Good quality	Turbidity shall not exceed: • 10 NTU over background when the background turbidity is 50 NTU or less; or A 20 percent increase in turbidity when the background turbidity is more than 50 NTU.

(F) **Aquatic life pH criteria**. Measurement of pH is expressed as the negative logarithm of the hydrogen ion concentration. Table 10 lists the pH levels allowed as a result of human actions for each of the aquatic life use categories.

Table 10. Aquatic Life pH Criteria for Marine Waters	
Use Category	**Criteria**
Extraordinary quality	pH shall be within the range of 7.0 to 8.5, with a human-caused variation within the above range of less than 0.2 units.
Excellent quality	Same as above
Good quality	pH shall be within the range of 7.0 to 8.5, with a human-caused variation within the above range of less than 0.5 units.

(G) **Aquatic life bacteria criteria**. Table 11 lists the bacteria criteria to protect aquatic life uses in marine waters.

Table 11. Aquatic Life Bacteria Criteria for Marine Waters	
Use Category	**Criteria**
Extraordinary quality	Fecal coliform organism levels must not exceed a geometric mean value of 14 colonies/100mL, and not have more than 10 percent of all samples (or any single sample when less than ten sample points exist) obtained for calculating the geometric mean value exceeding 43 colonies/100mL.
Excellent quality	Same as above
Good quality	Same as above

(2) Water contact uses. The water contact uses are primary contact and secondary contact.

(A) **Water contact bacteria criteria**. Table 12 lists the bacteria criteria to protect water contact uses for marine water.

Table 12. Water Contact Bacteria Criteria for Marine Waters	
Use Category	**Indicator Criteria**
Primary Contact Recreation	Enterococci organism levels must not exceed a geometric mean value of 35/100 mL, with no single sample value exceeding 104/100 mL.
Secondary Contact Recreation	Enterococci organism levels must not exceed a geometric mean value of 35/100 mL, with no single sample value exceeding 276/100 mL.

(3) Cultural uses. The cultural water uses include ceremonial and religious water contact, and cultural and subsistence fish consumption.

(A) **Ceremonial and religious water contact**. This use includes waters that are protected for ceremonial or religious activities where a person would have direct contact with water to the point of complete submergence. In addition to the narrative criteria in Section 10, waters that are used for, or designated for, ceremonial and religious activities involving water contact shall also meet the bacteria criteria in Table 12 for primary contact recreation.

(B) **Cultural and subsistence fish consumption**. This use includes waters that are protected for harvest and ceremonial, cultural, or subsistence consumption of fish and shellfish. In addition to the narrative criteria in Section 10, waters that are used for, or designated to be used for, cultural and subsistence fish consumption shall also meet the human health toxics criteria in Section 8 (Table 13) based on consumption of organisms.

(4) Miscellaneous Uses. The miscellaneous marine water uses include wildlife habitat, commerce and navigation, conservancy, and aquaculture.

SECTION 7. Assignment of Designated Uses.

(1) Specific Classifications. The following designated uses are assigned to specific waterbodies as follows:

(A) **Fresh waters**.

(i) The mainstem Puyallup River from river mile (RM) 1.0 to the up-river boundary of the 1873 Survey Area of the Puyallup Reservation (~RM 7.3) shall be assigned the following designated uses:

(a) Native char rearing
(b) Native char migration
(c) Salmonid spawning
(d) Salmonid rearing and holding
(e) Salmonid migration
(f) Steelhead smoltification
(g) Primary contact recreation
(h) Domestic water supply
(i) Agricultural water supply
(j) Industrial water supply
(k) Ceremonial and religious water contact
(l) Cultural and subsistence fish consumption
(m) Wildlife habitat
(n) Commerce and navigation
(o) Estuarine and brackish water habitat

(B) **Marine Waters**.

(i) Those waters located adjacent to the Hylebos Waterway northwest of 11th Street and south of Marine View Drive, and referred to as the Inner Hylebos property in the Settlement Agreement; and those waters located adjacent to Commencement Bay, northwest of the Hylebos Waterway, and referred to as the Outer Hylebos property, shall be assigned the following designated uses:

(a) Excellent quality salmonid and other fish migration, rearing, spawning, and harvesting; clam, oyster, and mussel rearing, spawning, and harvesting; crustaceans and other shellfish (crabs, shrimp, crayfish, scallops, etc.) rearing spawning, and harvesting.
(b) Primary contact recreation
(c) Ceremonial and religious water contact
(d) Cultural and subsistence fish consumption
(e) Wildlife habitat
(f) Commerce and navigation
(g) Estuarine and brackish water habitat
(h) Conservancy

(2) General Classifications.

(A) **Fresh Waters**.

(i) All fresh waters not specifically classified shall be assigned the following designated uses

(a) Salmonid spawning
(b) Salmonid rearing and holding
(c) Salmonid migration
(d) Primary contact recreation
(e) Domestic water supply
(f) Agricultural water supply
(g) Industrial water supply
(h) Ceremonial and religious water contact
(i) Cultural and subsistence fish consumption
(h) Wildlife habitat
(k) Commerce and navigation

(B) **Estuarine Waters.**

(i) All estuarine waters not specifically classified shall be assigned the following designated uses

(a) Salmonid spawning
(b) Salmonid rearing and holding
(c) Salmonid migration
(d) Primary contact recreation
(e) Agricultural water supply
(f) Industrial water supply
(g) Ceremonial and religious water contact
(h) Cultural and subsistence fish consumption
(i) Wildlife habitat
(j) Commerce and navigation
(k) Estuarine and brackish water habitat

(C) **Marine Waters.**

(i) All marine waters not specifically classified shall be assigned the following designated uses

(a) Excellent quality salmonid and other fish migration, rearing, spawning, and harvesting; clam, oyster, and mussel rearing, spawning, and harvesting; crustaceans and other shellfish (crabs, shrimp, crayfish, scallops, etc.) rearing spawning, and harvesting.
(b) Primary contact recreation

(c) Ceremonial and religious water contact
(d) Cultural and subsistence fish consumption
(e) Wildlife habitat
(f) Commerce and navigation

(3) **Waters of Exceptional Cultural Significance.**

All surface waters of the Puyallup Tribe are hereby designated as waters of *Exceptional Cultural Significance*, as defined in Section 15(3) of these standards.

SECTION 8. Toxic Substances.

(1) Toxic substances shall not be introduced above natural background levels in surface waters of the Puyallup Tribe which have the potential either singularly or cumulatively to adversely affect characteristic water uses, cause acute or chronic conditions to the most sensitive biota dependent upon those waters, or adversely affect public health, as determined by the Department.

(2) The Department shall employ or require chemical testing, acute and chronic toxicity testing, and biological assessments, as appropriate, to evaluate compliance with subsection (1) of this section and to ensure that aquatic communities and the existing and characteristic beneficial uses of waters are being fully protected.

(3) Criteria for toxic, and other substances not listed shall be determined with consideration of *USEPA Quality Criteria for Water, 1986*, as updated, and other relevant information as appropriate.

(4) Risk-based criteria for carcinogenic substances shall be applied such that the upper-bound excess cancer risk is less than or equal to one in one million, which means the probability of one excess cancer per one million people exposed.

(5) The aquatic organism consumption rate utilized in determining the human health criteria shall be 142.4 grams per day (based on EPA default subsistence consumption rate). A more accurate rate may be substituted following the completion of a statistical survey of Tribal members and consideration of baseline conditions.

(6) Criteria for metals shall be applied as dissolved values, unless otherwise specified.

(7) The criteria in the following table shall be applied to surface waters of the Puyallup Tribe for the protection of aquatic life and human health. Aquatic life criteria (chronic and acute) and human health criteria based on consumption of organisms only shall apply to all surface waters. In addition to these criteria, human health criteria based on consumption of both water and organisms shall apply to all surface waters whose designated uses include domestic water supply.

(8) **Water Quality Criteria for Toxic Pollutants.** The concentration for each compound listed in this table is a criterion for aquatic life or human health protection. Selecting values for regulatory purposes will depend on the most sensitive beneficial use to be protected and the level of protection necessary for aquatic life and human health as specified within this table. All concentrations, except asbestos, are micrograms per liter (μg/L).

Table 13. Toxics Criteria for Aquatic Life and Human Health						
Compound Name (or Class)	**Fresh Water**		**Marine Water**		**Human Health Criteria**	
	Acute[a] Criteria	**Chronic[b] Criteria**	**Acute[a] Criteria**	**Chronic[b] Criteria**	**Water &[c] Organisms**	**Organisms Only[d]**
Acenaphthene					115	122
Acrolein					33	36
Acrylonitrile					0.02	0.03
Aldrin	3.0e		1.3e		0.000006	0.000006
Aluminum (pH 6.5 - 9.0 only)	750	87				
Ammonia, total	f	G	233	35		
Anthracene					3,350	4,920
Antimony					5.23	78.7
Arsenic	340h	150h	69h	36h	0.005h	0.006h
Asbestos					7 MFLi	
Benzene					0.88	3.3
Benzidine					0.00002	0.00002
Benz(a)Anthracene					0.0015	0.0022
Benzo(a)Pyrene					0.0015	0.0022
Benzo(b)Fluoranthene,					0.0015	0.0022
Benzo(k)Fluoranthene					0.0015	0.0022
BHC-Alpha Lindane					0.0005	0.0006
BHC-Beta Lindane					0.0018	0.0021
BHC-Gamma Lindane	0.95e		0.16e		0.0026	0.0029
Bis-2-ethylhexyl phthalate					0.24	0.27
Bromoform					3.5	17
Butylbenzyl Phthalate					230	240
Cadmium	0.5j	0.09j	40	8.8		
Carbon Tetrachloride					0.12	0.20
Chlordane	2.4e	0.0043	0.09e	0.004	0.0001	0.0001
Chloride	860,000	230,000				
Chlorine	19	11	13	7.5		

Table 13. Toxics Criteria for Aquatic Life and Human Health						
Compound Name (or Class)	Fresh Water		Marine Water		Human Health Criteria	
	Acute[a] Criteria	Chronic[b] Criteria	Acute[a] Criteria	Chronic[b] Criteria	Water &[c] Organisms	Organisms Only[d]
Chlorobenzene					81	190
Chlorodibromomethane					0.33	1.6
Chloroform					4.5	21
Chloroisopropyl Ether (Bis 2)					1,200	8,000
Chloroethyl Ether (Bis)					0.021	0.065
Chloronaphthalene, 2-					180	190
Chlorophenol, 2-					17	18
Chlorpyrifos	0.083	0.041	0.011	0.0056		
Chromium (Hex)	16	11	1100	50		
Chromium (Tri)	183j	24j				
Chrysene					0.0015	0.0022
Copper	3.6j	2.7j	4.8	3.1		
Cyanide	22	5.2	1.0	1.0	130	130
DDT, 4,4′-	1.1e	0.001	0.13e	0.001	0.000027	0.000027
DDT Metabolite (DDE, 4,4′-)					0.000027	0.000027
DDT Metabolite (DDD, 4,4′-)					0.000038	0.000038
Demeton		0.1		0.1		
Dibenzo(a,h)Anthracene					0.0015	0.0022
Dibutyl Phthalate					480	550
Dichlorobenzene, 1,2- (o)					130	160
Dichlorobenzene, 1,3- (m)					95	120
Dichlorobenzene, 1,4- (p)					19	24
Dichlorobenzidine, 3,3-					0.0034	0.0035
Dichlorobromomethane					0.45	2.1
Dichlorodifluoromethane					5,500	26,000
Dichloroethane, 1,2-					0.35	4.5
Dichloroethylene, 1,2-trans-					630	6,200

Table 13. Toxics Criteria for Aquatic Life and Human Health						
Compound Name (or Class)	Fresh Water		Marine Water		Human Health Criteria	
	Acute[a] Criteria	Chronic[b] Criteria	Acute[a] Criteria	Chronic[b] Criteria	Water &[c] Organisms	Organisms Only[d]
Dichloroethylene, 1,1-					0.042	0.15
Dichlorophenol, 2,4-					27	36
Dichloropropane, 1,2-					0.41	1.8
Dichloropropylene, 1,3-					.31	2.6
Dieldrin	0.24e	0.056	0.71e	0.0019	0.0000066	0.0000066
Diethyl Phthalate					4,500	5,400
Dimethyl Phenol, 2,4-					91	105
Dimethyl Phthalate					98,000	140,000
Dinitrophenol, 2,4-					63	660
Dinitrophenol, 2-, Methyl 4,6-					9.8	35
Dinitrotoluene, 2,4-					0.088	0.41
Dioxin (2,3,7,8-TCDD)					.0000000006	.0000000006
Diphenylhydrazine, 1,2-					0.016	0.025
Endosulfan-Alpha	0.22e	0.056	0.034e	0.0087	10	11
Endosulfan-Beta	0.22e	0.056	0.034e	0.0087	10	11
Endosulfan Sulfate					10	11
Endrin	0.086e	0.036	0.037e	0.0023	0.0074	0.0074
Endrin Aldehyde					0.037	0.037
Ethylbenzene					190	260
Fluoranthene					17	17
Fluorene					450	660
Guthion		0.01		0.01		
Heptachlor	0.52e	0.0038	0.053e	0.0036	0.0000097	0.0000098
Heptachlor Epoxide	0.52e	0.0038	0.053e	0.0036	0.0000048	0.0000048
Hexachlorobenzene					0.000035	0.000035
Hexachlorobutadiene					0.38	2.3
Hexachlorocyclopentadiene					32	136

Table 13. Toxics Criteria for Aquatic Life and Human Health						
Compound Name (or Class)	Fresh Water		Marine Water		Human Health Criteria	
	Acute[a] Criteria	Chronic[b] Criteria	Acute[a] Criteria	Chronic[b] Criteria	Water &[c] Organisms	Organisms Only[d]
Hexachloroethane					0.35	0.40
Indeno (1,2,3-cd) Pyrene					0.0015	0.0022
Iron		1,000			300	
Isophorone					28	120
Lead	14j	0.5j	210	8.1		
Malathion		0.1		0.1		
Manganese					50	100
Mercury	1.4	0.77m	1.8	0.94m	0.002	0.002
Methoxychlor		0.03		0.03	40	
Methyl Bromide					39	185
Methylene Chloride					4.4	73
Mirex		0.001		0.001		
Nickel	145j	16j	74	8.2	160	210
Nitrates					10,000	
Nitrobenzene					15	85
Nitrosodimethylamine, N-					0.00069	0.37
Nitrosodi-n-Propylamine, N-					0.0046	0.062
Nitrosodiphenylamine, N-					0.67	0.74
Nitrosopyrrolidine, N-					0.016	4.3
Parathion	0.065	0.013				
Total PCBs		0.014		0.03	0.000008	0.000008

Table 13. Toxics Criteria for Aquatic Life and Human Health						
Compound Name (or Class)	Fresh Water		Marine Water		Human Health Criteria	
	Acute[a] Criteria	Chronic[b] Criteria	Acute[a] Criteria	Chronic[b] Criteria	Water &[c] Organisms	Organisms Only[d]
Pentachlorobenzene					0.18	0.19
Pentachlorophenol	19n	15n	13	7.9	0.16	0.37
Phenol					19,000	210,000
Phosphorus Elemental				0.1		
Pyrene					330	490
Selenium		5.0	290	71		
Silver	0.3j		1.9			
Sulfide - Hydrogen Sulfide		2.0		2.0		
Tetrachloroethane, 1,1,2,2,-					0.13	0.49
Tetrachloroethylene					0.28	0.40
Thallium					0.25	0.28
Toluene					4,000	9,200
Toxaphene	0.73	0.0002	0.21	0.0002	0.000034	0.000034
Trichlorobenzene, 1,2,4-					38	43
Trichloroethane, 1,1,2-					0.47	1.9
Trichloroethylene					1.6	3.7
Trichlorophenol, 2,4,6-					0.27	0.30
Vinyl Chloride					1.9	24
Zinc	36j	36j	90	81		

Footnotes for Table 13:

a. Acute criteria: EPA CWA § 304(a) Criteria Maximum Concentration (CMC). The threshold value at or below which there should be no unacceptable effects to fresh water or marine aquatic organisms and their uses if the one-hour average concentration does not exceed that CMC value more than once every three years on average.

b. Chronic criteria: EPA CWA § 304(a) Criteria Continuous Concentration (CCC). The threshold value at or below which there should be no unacceptable effects to fresh water or marine aquatic organisms and their uses if the four-day average concentration does not exceed that CCC value more than once every three years on the average.

c. Water and Organisms: Values represent the maximum ambient water concentration for consumption of both contaminated water and fish or other aquatic organisms.

d. Organisms Only: Values represent the maximum ambient water concentration for consumption of fish or other aquatic organisms.

e. The acute values shown are final acute values (FAV) which by the 1980 Guidelines are instantaneous values, as contrasted with a CMC which is a one-hour average.

f. Acute Criterion: The one-hour average concentration of total ammonia nitrogen (in mg N/L) does not exceed, more than once every three years on the average, the CMC (acute criterion) calculated using the following equations.

Where salmonid fish are present:

$$\text{CMC} = \frac{0.275}{1+10^{7.204-pH}} + \frac{39.0}{1+10^{pH-7.204}}$$

Or where salmonid fish are not present:

$$\text{CMC} = \frac{0.411}{1+10^{7.204-pH}} + \frac{58.4}{1+10^{pH-7.204}}$$

g. Chronic Criterion: The thirty-day average concentration of total ammonia nitrogen (in mg N/L) does not exceed, more than once every three years on the average, the CCC (chronic criterion) calculated using the following equations.

When fish early life stages are present:

$$\text{CCC} = \left(\frac{0.0577}{1+10^{7.688-pH}} + \frac{2.487}{1+10^{pH-7.688}}\right) \bullet MIN\left(2.85, 1.45 \bullet 10^{0.028(25-T)}\right)$$

When fish early life stages are absent:

$$\text{CCC} = \left(\frac{0.0577}{1+10^{7.688-pH}} + \frac{2.487}{1+10^{pH-7.688}}\right) \bullet 1.45 \bullet 10^{0.028 \bullet (25-MAX(T,7))}$$

In addition, the highest four-day average within the 30-day period should not exceed 2.5 times the CCC.

h. The aquatic life criteria refer to the trivalent form only. The human health criteria refer to the inorganic form only.

i. MFL = Million fibers per liter, with fiber length >10 microns.

j. Fresh water aquatic life criteria for these metals are expressed as a function of total hardness (mg/L $CaC0_3$) according to the following equations. The factors for the equations are provided in the following matrix. Values in the above table correspond to a hardness of 25 mg/L for illustrative purposes only.

Acute criterion = $\exp\{m_A[\ln(\text{hardness})]+b_A\}$
Chronic criterion = $\exp\{m_C[\ln(\text{hardness})]+b_C\}$

Table 14. Factors for Calculating Metals Criteria						
Metal	**m_A**	**b_A**	**m_C**	**b_C**	**Conversion Factors**	
					Acute	**Chronic**
Cadmium	1.0166	-3.924	0.7409	-4.719	1.002*	0.967*
Chromium (III)	0.8190	3.7256	0.8190	0.6848	0.316	0.860
Copper	0.9422	-1.700	0.8545	-1.702	0.960	0.960
Lead	1.273	-1.460	1.273	-4.705	0.993*	0.993*
Nickel	0.8460	2.255	0.8460	0.0584	0.998	0.997
Silver	1.72	-6.59	N/A	N/A	0.85	N/A
Zinc	0.8473	0.884	0.8473	0.884	0.978	0.986

Note to the table: The term "exp" represents the base e exponential function.

* The conversion factors (CF) for cadmium and lead are hardness dependent and can be calculated for any hardness [see limitations in 40 CFR 131.36(c)(4)] using the following equations:

Cadmium Acute CF = 1.136672–[(ln hardness) (0.041838)]
Cadmium Chronic CF = 1.101672–[(ln hardness) (0.041838)]
Lead (Acute and Chronic) CF = 1.46203–[(ln hardness) (0.145712)]

k. This letter is not used as a footnote.

l. This letter is not used as a footnote.

m. If the ambient concentration of total mercury exceeds 0.012 µg/L more than once in a 3-year period in the ambient water, the edible portion of aquatic species of concern must be analyzed to determine whether the concentration of methyl mercury exceeds the FDA action level (1.0 mg/kg). If the FDA action level is exceeded, the Tribe must notify the EPA Region 10 Regional Administrator, initiate a site-specific criterion or a revision of its mercury criterion so as to protect designated uses, and take other appropriate action, such as issuance of a fish consumption advisory for the affected area.

n. Fresh water aquatic life criteria for pentachlorophenol are expressed as a function of pH, and are calculated as follows (values in the table correspond to a pH of 7.8):

Acute criterion = exp(1.005(pH)–4.830)
Chronic criterion = exp(1.005(pH)–5.290)

SECTION 9. Radioactive Substances.

(1) Deleterious concentrations of radioactive materials for all classes shall be as determined by the lowest practicable concentration attainable and in no case shall exceed:

(A) 1/100 of the values listed in the Washington Administrative Code (WAC) at WAC 246-221-290 (Column 2, Table II, Appendix A, rules and regulation for radiation protection); or

(B) USEPA Drinking Water Regulations for radionuclides, as published in the Federal Register of July 9, 1976, or subsequent revisions thereto.

(2) Nothing in this ordinance shall be interpreted to be applicable to those aspects of governmental regulation of radioactive wastes which have been preempted from tribal regulation by the Atomic Energy Act of 1954, as amended.

SECTION 10. Narrative Criteria.

(1) All surface waters of the Puyallup Tribe shall be free from substances attributable to point source discharges, nonpoint sources, or instream activities in accordance with the following:

(A) Floating Solids, Oil and Grease: All waters shall be free from visible oils, scum, foam, grease, and other floating materials and suspended substances of a persistent nature resulting from other than natural causes.

(B) Color: True color-producing materials resulting from other than natural causes shall not create an aesthetically undesirable condition; nor should color inhibit photosynthesis or otherwise impair the existing and designated uses of the water.

(C) Odor and Taste: Water contaminants from other than natural causes shall be limited to concentrations that will not impart unpalatable flavor to fish, or result in offensive odor or taste arising from the water, or otherwise interfere with the existing and designated uses of the water.

(D) Nuisance Conditions: Nutrients or other substances from anthropogenic causes shall not be present in concentrations which will produce objectionable algal densities or nuisance aquatic vegetation, result in a dominance of nuisance species, or otherwise cause nuisance conditions.

(E) Turbidity: Turbidity shall not be at a level to potentially impair designated uses or aquatic biota.

(F) Bottom Deposits: All surface waters of the Puyallup Tribe shall be free from anthropogenic contaminants that may settle and have a deleterious effect on the aquatic

biota or that will significantly alter the physical and chemical properties of the water or the bottom sediments.

SECTION 11. Biological Criteria.

(1) Surface waters of the Puyallup Tribe shall be of sufficient quality to support aquatic biota without detrimental changes in the natural aquatic communities.

(2) Surface waters of the Puyallup Tribe shall be free from substances, whether attributable to point source discharges, nonpoint sources, or instream activities, in concentrations or combinations which would impair the structure or limit the function of the natural aquatic community as it naturally occurs.

(3) The structure and function of the natural aquatic community shall be measured by biological assessment methods approved by the Department.

(4) Determination of impairment or limitation of the natural aquatic community shall be based on a comparison with the aquatic community found at an appropriate reference site or region, as determined by the Department.

SECTION 12. Wildlife Criteria.

(1) Surface waters of the Puyallup Tribe shall be of sufficient quality to protect and support all life stages of resident and/or migratory wildlife species which live in, on, or near the waters of the Puyallup Tribe.

SECTION 13. Wetlands Criteria.

(1) All wetlands that are considered surface waters of the Puyallup Tribe which are not constructed wetlands shall be subject to the Narrative Criteria (**section 10**), Antidegradation (**section 15**), and Toxic Substances Criteria (**section 8)** provisions within these Standards.

(2) Wetlands shall not be used in lieu of stormwater treatment, except as specified by number 5 below. Stormwater shall be treated before discharge to a wetland.

(3) Point and nonpoint sources of pollution shall not cause destruction or impairment of wetlands except where authorized under section 404 of the CWA.

(4) Wetlands shall not be used as repositories or treatment systems for wastes from human sources, except as specified by number 5, below.

(5) Wetlands intentionally created from non-wetland sites for the sole purpose of wastewater or stormwater treatment (constructed wetlands) are not considered "surface waters of the Puyallup Tribe " and are not subject to the provisions of this section.

(6) The primary means for protecting water quality in wetlands is through implementing the antidegradation procedures described in Part III of these Standards.

(A) In addition to designated uses, wetlands may have existing beneficial uses that are to be protected that include ground water exchange, shoreline stabilization, and storm water attenuation.

(B) Water quality in wetlands is maintained and protected by maintaining the hydrologic conditions, hydrophytic vegetation, and substrate characteristics necessary to support existing and designated uses.

(C) Wetlands shall be delineated using the Washington State Wetlands Identification and Delineation Manual.

SECTION 14. Instream Flow Criteria.

(1) Those flows and levels, including tributary surface and ground waters, necessary to maintain the physical, chemical, biological, and cultural integrity of the Reservation's waters shall be maintained and restored to the fullest extent practicable in order to maintain and restore existing and designated uses. Such uses shall include migration, spawning, incubation, and rearing by anadromous fish. At a minimum, instantaneous instream flows shall meet or exceed relevant instream flows set by the Washington Department of Ecology in Chapter 173-510 of the Washington Administrative Code. The Tribe will, from time-to-time, set habitat-specific flows and levels for existing and restored anadromous fish habitat within its jurisdiction.

PART III – ANTIDEGRADATION

SECTION 15. Antidegradation Policy.

The objective of this policy is to protect and maintain the chemical, physical, biological, and cultural integrity of the surface waters of the Puyallup Tribe. The antidegradation policy of the Puyallup Tribe is stated as follows:

(1) **Existing Uses.** Existing instream water uses, and the level of water quality and quantity necessary to protect the chemical, physical, biological, and cultural integrity of the existing uses, shall be maintained and protected. No degradation which would interfere with or become injurious to those uses shall be allowed. Where designated uses of a waterbody are impaired, there shall be no lowering of water quality with respect to the pollutant or pollutants which are causing or contributing to the impairment.

(2) **High Quality Waters**. Where the quality of waters exceeds levels necessary to support existing uses, that quality shall be maintained and protected unless:

> (A) The Department finds, after the Tribe's public participation and intergovernmental coordination provisions have been met, that allowing lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located;
>
> (B) All wastes and other materials and substances discharged into said waters shall be provided with all known, available, and reasonable methods of prevention, control, and treatment by new and existing point sources before discharge. All activities which result in the pollution of waters from nonpoint sources shall be provided with all known, available, and reasonable best management practices; and
>
> (C) When the lowering of water quality in high quality waters is authorized, the lower quality shall still be of high enough quality to fully support all existing beneficial uses.

(3) **Waters of Exceptional Cultural Significance**. Where waters are determined by the Tribe to be of exceptional cultural significance, any proposed activity that would result in a lowering of water quality is prohibited, except under the following conditions:

> (A) **Trading**. A proposed activity that will result in a new or expanded source may also be allowed where the applicant agrees to implement or finance upstream controls of point or nonpoint sources sufficient to offset the water quality effects of the proposed activity.
>
> (B) **Exceptions**. An exception may be made for permanent new or expanded sources that, overall, serve to maintain, restore, or enhance the value, quality, or use of waters of exceptional cultural significance.

(C) **Temporary and Limited Effects**. Activities that would result in a temporary and limited effect on water quality of waters of exceptional cultural significance may be authorized. The decision regarding whether effects will be temporary and limited will be handled on a case-by-case basis (see also Section 17).

(4) **Outstanding National Resource Waters**. Whenever high quality waters constitute an outstanding National resource, such as waters of National and Tribal parks and wildlife refuges and waters of exceptional recreational and ecological significance, that water quality shall be maintained and protected. Any proposed activity that would result in a permanent lowering of water quality is prohibited.

(5) **Thermal Discharges**. In those cases where potential water quality impairment associated with a thermal discharge is involved, the antidegradation policy and implementing method shall be consistent with section 316 of the Clean Water Act.

(6) **Antidegradation Review**. The Department will conduct some level of antidegradation review for all regulated activities that have the potential to affect existing water quality. Antidegradation reviews and all other requirements of this section shall be implemented consistent with the Tribe's Antidegradation Implementation Procedures (Appendix XX).

PART IV – GENERAL POLICIES

SECTION 16. Mixing Zones.

(1) **General Conditions**.

(A) Mixing zones shall not be permitted in waters of the Puyallup Tribe under the following circumstances:

(i) No mixing zones shall be granted for new sources or new discharges.

(ii) No mixing zones shall be granted for discharges to ground water, wetlands, ephemeral or intermittent streams, intermittent drainage canals, lakes, or reservoirs.

(iii) No mixing zones shall be granted within 300 yards of drinking water intakes, restoration sites and areas identified as critical habitat for threatened or endangered species, conservancy areas, cultural areas, and recreation.

(iv) No mixing zones or zones of initial dilution shall be granted for discharges exceeding acute aquatic life criteria.

(B) Mixing zones for the discharge of known carcinogens, mutagens, teratogens, or bioaccumulative or persistent pollutants will be not be permitted in the waters of the Puyallup Tribe as of January 1, 2013.

(C) The allowable size and location of a mixing zone and the associated effluent limits shall be established in certifications under Section 401 of the Clean Water Act, discharge permits, general permits, or orders, as appropriate. The Department may revise, revoke, or deny certifications or orders authorizing mixing zones upon expiration of the permit or order if information suggests that the characteristics and impacts of the mixing zone are different than those used to establish the mixing zone specifications or if evidence shows acute or chronic water quality criteria are not met at the mixing zone boundary.

(D) Mixing zones shall not be used for, or considered as a substitute for, waste treatment. The applicant shall show, to the satisfaction of the Department, that AKART has been fully applied before a mixing zone is granted. A discharger shall be required to fully apply AKART prior to being authorized a mixing zone.

(E) No mixing zone shall be granted unless the supporting information clearly indicates the mixing zone would not, as determined by the Department, have any potential to adversely affect biota or habitat, interfere with the existing or designated uses of the water body, create a barrier to migration of species, adversely affect the ecosystem, or adversely affect public health.

(F) Mixing zone determinations shall consider critical discharge conditions. Determination of the dilution available and size of mixing zones will include the following:

(i) critical conditions;

(ii) mixing characteristics of the receiving water;

(iii) characteristics of the effluent; and

(iv) impacts to use classifications of the receiving water.

(G) Prior to authorization of a mixing zone by the Department, the determination of available dilution and size of the mixing zone must be substantiated in the receiving water environment.

(H) Mixing zones may be granted for whole effluent or on a pollutant-by-pollutant basis.

(I) The Department shall consider prohibiting or decreasing the size of a mixing zone under the following circumstances:

(i) where discharges could cause an exceedance of the chronic criteria outside of the mixing zone boundary;

(ii) where aquatic life could be attracted to the effluent plume and harmed;

(iii) where the mixing zone could impact drinking water intakes, restoration sites and areas identified as critical habitat for threatened or endangered species, conservancy areas, cultural areas, and recreation sites.

(iv) where unacceptable cumulative effects could occur from multiple pollutants, discharges and/or mixing zones.

(J) Except as specified in Narrative Criteria (Section 10), water quality standards may be exceeded within a mixing zone authorized by the Department. Water quality criteria shall not be violated outside of the boundary of a mixing zone as a result of the discharge for which the mixing zone was authorized.

(K) The Department may, as necessary, require mixing zone monitoring studies and/or bioassays to be conducted to evaluate water quality or biological status within and outside of the mixing zone boundary.

(L) The size of a mixing zone and the concentrations of pollutants present shall be minimized to the maximum extent technically feasible. Mixing zones shall be as small as feasible, no larger than necessary to meet water quality standards, and in no case shall be larger than specified in subsections 16(5) through 16(7).

(M) Mixing zones approved under the permit renewal process shall include a provision requiring annual inspections of the diffuser and outfall.

(N) In lakes and reservoirs, mixing zones shall not be allowed unless it can be demonstrated to the satisfaction of the Department that:

(i) Other siting, technological, and managerial options that would avoid the need for a lake mixing zone are not achievable; and

(ii) Overriding considerations of public interest will be served.

(O) In estuaries or waters influenced by tides, mixing zone determinations shall be made considering effects due to tidal flux.

(2) **Overlap of mixing zones**.

Where mixing zones are overlapping or adjacent, the total size of all mixing zones shall not exceed the size allowed for one mixing zone, as described in subsections 16(5) through 16(7). In no case shall multiple mixing zones cause the specifications in subsections 16(5) through 16(7) to be exceeded.

(3) **Stormwater**.

(A) Stormwater discharge from any "point source" containing "process wastewater" as defined in 40 C.F.R. Part 122.2 shall fully conform to the specifications in subsections 16(5) through 16(7) and the overlap criteria in subsection 16(2) of this section.

(B) Stormwater discharges not described by (A) of this subsection may not be granted an exemption to the numeric size criteria in subsection 16(1)(I) and the overlap criteria in subsection 16(2).

(4) **Rivers and streams**.

(A) Where mixing is demonstrated to be instantaneous and complete and the pollutants are not persistent or bioaccumulative, the permittee may be allowed no more than the following flows for dilution of the effluent:

(i) Acute criteria: the 1B3 flow;

(ii) Chronic criteria: the 4B3 flow;

(iii) Human health criteria/carcinogens: the harmonic mean flow; and

(iv) Human health criteria/non-carcinogens: the 30Q5 flow.

(B) Where mixing is not instantaneous and complete, or for the discharge of persistent or bioaccumulative pollutants prior to 2013, the permittee may be allowed no more than the minimum dilution available at the following points:

(i) Acute criteria:no dilution;

(ii) Chronic criteria: a point not to exceed 25 percent of the stream width at the 4B3 flow, or a distance of 10 stream-widths downstream, whichever is more stringent;

(iii) Human health criteria/carcinogens: a point not to exceed 25 percent of the stream width at the harmonic mean flow, or a distance of 10 stream-widths downstream, whichever is more stringent; and

(iv) Human health criteria/non-carcinogens: at the edge of the zone of initial dilution.

(C) If sufficient data are not available to determine the available dilution as required by Subsection (B), the permittee may be allowed no more than the following dilutions:

(i) Acute criteria: no dilution;

(ii) Chronic criteria: 10 percent of the 4B3 flow;

(iii) Human health criteria/carcinogens: 10 percent of the harmonic mean flow; and

(iv) Human health criteria/non-carcinogens: 10 percent of the 30Q5 flow.

(5) **In lakes and reservoirs**, upon satisfaction of the requirements of Subsection 16(1)(N), the permittee may be allowed up to the minimum dilution available at the following points:

(A) Acute criteria: at the point of discharge;

(B) Chronic criteria: a point not to exceed 5 percent of the width of any given cross-section or 5 percent of the surface area of the waterbody;

(C) Human health criteria/carcinogens: at the point of discharge; and

(D) Human health criteria/non-carcinogens: at the point of discharge.

(6) **In estuaries and enclosed bays**, the permittee may be allowed no more than the minimum dilution available at the following points:

(A) Acute criteria: no dilution;

(B) Chronic criteria: a point not to exceed 10 percent of any given cross-section of the waterbody, or 200 feet plus the depth of the water over the discharge ports at mean lower low water, whichever is more stringent;

(C) Human health criteria/carcinogens: at the edge of the zone of initial dilution; and

(D) Human health criteria/non-carcinogens: at the edge of the zone of initial dilution.

SECTION 17. Short-Term Modifications.

(1) The criteria and special conditions established in Section 3 through Section 14 may be modified for a specific water body on a short-term basis when necessary to accommodate essential activities, respond to emergencies, or to otherwise protect the public interest, even though such activities may result in a temporary reduction of water quality conditions below those criteria and classifications established by this Ordinance. Such modification shall be issued in writing by the director or his/her designee subject to such terms and conditions as he/she may prescribe, and such modification shall not exceed a twelve-month period (actual periods of non-attainment would generally be limited to hours or days rather than weeks or months).

(2) In no case will any degradation of water quality be allowed if this degradation significantly interferes with or becomes injurious to existing water uses or causes long-term harm to the environment.

(3) Notwithstanding the above, the aquatic application of herbicides which result in water use restrictions shall be considered an activity for which a short-term modification generally may be issued subject to the following conditions:

(A) A request for a short-term modification shall be made to the Department on forms supplied by the Department. Such request generally shall be made at least thirty days prior to herbicide application.

(B) Such herbicide application shall be in accordance with label provisions promulgated by USEPA under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended (7 U.S.C. 136, *et seq.*);

(C) Notice, including identification of the herbicide, applicator, location where the herbicide will be applied, proposed timing and method of application, and water use restrictions shall be given according to the following requirements:

(i) Appropriate public notice as determined and prescribed by the director or his/her designee shall be given of any water use restrictions specified in USEPA label provisions;

(ii) The Puyallup Tribe's Departments of Fisheries shall be notified twenty-four hours prior to herbicide application; and

(iii) In the event of any fish kills, the Puyallup Tribe's Departments of Environmental Programs and Fisheries shall be notified immediately;

(D) The herbicide application shall be made at times so as to:

(i) Minimize public water use restrictions during weekends; and

(ii) Completely avoid public water use restrictions during the opening week of fishing season. Memorial Day weekend, Independence Day weekend, and Labor Day weekend.

(E) Any additional conditions as may be prescribed- by the director of his/her designee.

SECTION 18. Site-Specific Criteria.

(1) Where the attainable condition of existing and designated uses for the water body would be fully protected using an alternative criterion, site-specific criteria may be adopted.

(A) The site-specific criterion must be consistent with the federal regulations on designating and protecting uses (currently 40 CFR 131.10 and 131.11); and (b) The decision to approve a site-specific criterion must be subject to a public involvement and intergovernmental coordination process.

(2) The site-specific analyses for the development of a new water quality criterion must be conducted in a manner that is scientifically justifiable and consistent with the assumptions and rationale in "*Guidelines for Deriving National Water Quality Criteria for the Protection of Aquatic Organisms and their Uses*," EPA 1985; and conducted in accordance with the procedures established in the "*Water Quality Standards Handbook*," EPA 1994, as revised.

(3) The decision to approve the site-specific criterion must be based on a demonstration that it will protect the existing and attainable uses of the water body.

(4) Site-specific criteria are not in effect until they have been incorporated into these Standards and approved by the USEPA.

PART V – IMPLEMENTATION OF STANDARDS

SECTION 19. Achievement Considerations.

To fully achieve and maintain the foregoing water quality of the Puyallup Reservation, it is the intent of the Department to apply the various implementation and enforcement authorities at its disposal, including participation in the programs of the Federal Clean Water Act, 33 U.S.C. § 1251, *et seq*., as appropriate. The Department also intends to seek cooperative arrangements with other tribal, federal, state, and local governments, and with non-governmental organizations, in the development and implementation of an estuary management program, to enforce these standards. Further, it will be required that all activities which result in the discharge of wastes into surface waters of the Puyallup Tribe, or otherwise adversely affect the quality of those waters, be in compliance with the waste treatment and discharge provisions of Puyallup tribal law or federal law.

SECTION 20. Implementation.

(1) Discharges from municipal, commercial, and industrial operations. The primary means to be used for controlling point source discharges from or onto lands or waters under the jurisdiction of the Puyallup Tribe shall be through the issuance of waste disposal permits.

(2) Miscellaneous waste discharge or water quality effect sources. The director shall, through the issuance of regulatory permits, directives, and orders, as are appropriate, control miscellaneous waste discharges and water quality effect sources not covered by Section 15(1) . It is noted that, from time to time, certain short-term activities which are deemed necessary to accommodate essential activities or to otherwise protect the public interest may be specially authorized by the director as indicated in Section 11, under such conditions as the director may prescribe, even though such activities may result in a reduction of water quality conditions below those criteria and classifications established by this ordinance.

(3) Nonpoint source and stormwater pollution.

(A)Activities that generate nonpoint source pollution shall be conducted so as to comply with the water quality standards. The primary means to be used for requiring compliance with the standards shall be through the application of all known and reasonable methods of prevention, control, and treatment (AKART), including best management practices (BMPs), required in waste discharge permits, rules, orders, directives, and other actions by the Department, including abatement, for activities which generate nonpoint source pollution.

(B) Best management practices (BMPs) shall be applied so that when all appropriate combinations of individual best management practices are utilized, violation of water quality criteria shall be prevented. If a discharger is applying all best management practices appropriate or required by the Department and a violation of water quality

criteria occurs, the discharger shall modify existing practices or apply further water pollution control measures, selected or approved by the Department, to achieve compliance with water quality criteria. Best management practices established in permits, orders, rules, or directives of the Department shall be reviewed and modified, as appropriate, so as to achieve compliance with water quality criteria.

(C) Activities which contribute to nonpoint source pollution shall be conducted utilizing best management practices to prevent violation of water quality criteria. When applicable best management practices are not being implemented, the Department may conclude individual activities are causing pollution contrary to law. In these situations, the Department may pursue orders, directives, permits, or civil or criminal sanctions, as appropriate, to gain compliance with the standards.

(D) Activities which discharge pollutants in stormwater shall be conducted so as to comply with the water quality standards. The primary means to be used for requiring compliance with the standards shall be through the application of AKART, including BMPs, required in waste discharge permits, rules, orders, directives, and other actions by the Department, including abatement, for activities which generate stormwater pollution. The consideration and control procedures in 3(B) and (C) of this section apply to the control of pollutants in stormwater.

(4) Allowance for Compliance Schedules.

(A) Permits, Orders, and Directives for existing discharges may include a schedule for achieving compliance with water quality criteria contained in this Ordinance. Such schedules of compliance shall be developed to ensure final compliance with all water quality based effluent limits in the shortest practicable time. Decisions regarding whether to issue schedules of compliance will be made on a case-by-case basis by the Department. Schedules of compliance may not be issued for new discharges. Schedules of compliance may be issued to allow for:

(i) construction of necessary treatment capability;
(ii) implementation of necessary best management practices;
(iii) implementation of additional stormwater AKART, including BMPs for discharges determined not to meet water quality criteria following implementation of an initial set of best management practices;
(iv) completion of necessary water quality studies; or
(v) resolution of a pending water quality standards issue through rulemaking action.

(B) For the period of time during which compliance with water quality criteria is deferred, interim effluent limitations shall be formally established, based on the best professional judgment of the Department.

(C) Prior to establishing a schedule of compliance, the Department shall require the discharger to evaluate the possibility of achieving water quality criteria, via non-construction changes (e.g. facility operation, pollution prevention). Schedules of

compliance may in no case exceed ten years, and shall generally not exceed the term of any permit.

SECTION 21. Surveillance.

A continuing surveillance program, to ascertain whether this Ordinance, waste disposal permits, orders, and directives promulgated and/or issued by the Department are being complied with, will be conducted by the Department staff as follows:

(1) Inspecting treatment and control facilities.

(2) Monitoring compliance at edge of mixing zones.

(3) Monitoring receiving water quality.

SECTION 22. Enforcement.

To ensure that the standards for water quality promulgated herein, the terms of waste disposal permits, and other orders and directives of the Department are fully complied with, the following enforcement tools will be relied upon by the Department, in cooperation with the Puyallup Tribe's Office of Legal Counsel and USEPA as the Department deems appropriate:

(1) Issuance of notices of violation and regulatory orders. Whenever in the opinion of the Department a person is violating or about to violate this Ordinance, the Department shall notify said person of its determination. Within thirty days, or a shorter period of time if the notice issued by the Department so specifies, said person shall notify the Department of the action taken or being taken in response to the Department's determination, whereupon the Department may issue a regulatory order as it deems appropriate. Whenever the Department deems immediate action is necessary to accomplish the purpose of this Ordinance, it may issue a regulatory order without first giving notice and thirty days for response.

(2) Initiation of actions requesting injunctive or other appropriate relief in Puyallup Tribal Court or federal court or such other courts as the Office of Legal Counsel or USEPA shall deem appropriate.

(3) Levying of civil penalties. Under this section, the director may levy a civil penalty up to five thousand dollars per day against a person who violates the terms of a waste discharge permit, or who discharges without such a permit when the same is required. If the amount of the penalty, which is subject to mitigation or remission by the Department, is not paid within thirty days after receipt of said notice, the Office of Legal Counsel, upon request of the director, shall bring an action in Puyallup Trial Court, federal court or such other court as the Office of Legal Counsel shall determine is appropriate to recover the same.

(4) Initiation of criminal proceedings, as appropriate.

(5) Issuance of regulatory orders or directives either by the Puyallup Tribe or through the United States, and if necessary, enforcement of such orders in the appropriate tribal or federal court.